

YATSENKO, G.K.

Expediency of quarantining the disease caused by *Phoma tuberosa*.
Zashch.rast.ot vred.i bol. 5 no.7:47 J1 '60. (MIRA 16:1)

1. Starshiy agronom Khabarovskoy karantinnoy inspektsii.
(Potatoes—Diseases and pests) (Phoma)

YATSENKO, G.K.

Oxygen exchange and photosynthetic pigments of the Black Sea alga
Cystoseira. Fiziol. rast. 10 no.6:661-666 M-D '63. (MIRA 17:1)

1. Department of Plant Physiology, I.I.Mechnikov University, Odessa.

YATSENKO, G.M.

Lower Precambrian of the Morskoy Range (eastern part of the
Lake Baikal region). Vest. L'vov. un. Ser. geol. no.2:70-75
'64. (MIRA 19:1)

GRITSENKO, A.P.; DOGOTAR', V.N.; YATSENKO, G.N.

Automatic device for measuring cardboard thickness.
Bum. prom. 36 no.10:21 0 '61. (MIRA 15:1)

1. Chernovitskiy gosudarstvennyy universitet.
(Paperboard--Testing)
(Measuring instruments)

YATSENKO, G. P.

"Free of Vibrations of Disks of Variable Thickness." Min Higher Education USSR,
Kiev Order of Lenin Polytechnic Inst, Kiev, 1952
(Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis', No. 32, 6 Aug 55

124-57-1-975

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 135 (USSR)

AUTHOR: Yatsenko, G. P.

TITLE: Free Oscillations of Parabolic Disks (Svobodnyye kolebaniya diskov parabolicheskogo profilya)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1955, Vol 18, pp 117-128

ABSTRACT: The author provides a solution for the problem of the free transverse vibrations of thin disks, symmetrical with respect to the center of their plane, wherein the thickness along a radius varies exponentially. Examples are examined.

1. Disks--Vibrations--Mathematical analysis

V. N. Geminov

Card 1/1

YATSENKO, I., inzh.

Introducing technically advanced pneumatic conveying systems. Mak.-
elev. prom. 26 no.10:26-27 0'60. (MIRA 13:10)

1. Lesogorskoye zavodoupravleniye.
(Pneumatic-tube transportation)

MEL'NIKOV, S., YATSENKO, I., inzh.

Without gas inspectors. Mast. ugl. 9 no.12:12 D '60. (MIRA 13:12)

1. Nachal'nik tekhnicheskogo upravleniya kombinata Karagandaugol'
(for Mel'nikov)

(Mine gases)

L 3959-66 EWT(1)/ETC/ENG(m)/EPA(w)-2 LJP(c) AT

ACCESSION NR: AP5016690

UR/0294/65/003/003/0354/0359
538.932.15

AUTHOR: Aleksandrov, A. F.; Yatsenko, I. M. 44.55

TITLE: Q-meter investigation of complex conductivity of neon plasma 44.55, 21 B

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 3, 1965, 354-359

TOPIC TAGS: plasma conductivity, dielectric constant, dielectric capacitor

ABSTRACT: A Q-meter study of the complex dielectric constant of a plasma (serving as a dielectric of a capacitor) is used to determine complex conductivity. The frequency range covered (0.5 to 25 Mc) by the probe corresponds to low frequencies (less than ion plasma frequency) and medium-range frequencies (those between ion and electron plasma frequencies). The investigated plasma is characterized by electron temperature much higher than ion temperature. The measurements were made on neon plasmas produced by 5 to 100 mA current discharges in gases at several pressures. The Q-meter method, employing a parallel capacitor of known value, is described in detail. The measurements indicate that the real part of the impedance is essentially pressure-independent and is determined by discharge current and

Card 1/2

L 3959-66

ACCESSION NR: AP5016690

probe frequency. The capacity is found to depend very strongly also on the geometry of the test capacitor. The results agree well with theoretically predicted values. Orig. art. has: 5 figures, 2 equations.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University)

SUBMITTED: 22Jul64

ENCL: 00

SUB CODE: ME, EM

NO REF SOV: 008

OTHER: 004

Card 2/2 DP

KREMENCHUTSKIY, N.F., kand. tekhn. nauk; GUMENYUK, T.Ye., kand. tekhn. nauk; IVANOV, V.A., inzh.; YATSENKO, I.S., inzh.

Preventing spontaneous fires in mines of the Promyshlennyy
Section of the Karaganda Basin. Izv. vys. ucheb. zav.; gor.
zhur. no.12:61-67 '61. (MIRA 16:7)

1. Karagandinskiy politekhnicheskiy institut (for Kremenchutskiy, Gumenyuk). 2. Karagandinskiy sovet narodnogo khozyaystva (for Ivanov). 3. Kombinat "Karagandaugol'" (for Yatsenko). Rekomendovana kafedroy rudnichnoy ventilyatsii i tekhniki bezopasnosti Karagandinskogo politekhnicheskogo instituta.
(Karaganda Basin—Coal mines and mining—Fires and fire prevention)

YATSENKO, I.S.; TSKHE, P.A.

Experience of Karaganda Basin mines in operating without special
gasmen. Ugol' 36 no.7:44-46 J1 '61. (MIRA 15:2)

1. Kombinat Karagandaugol (for Yatsenko). 2. KhMI AN KazSSR (for
TSkhe).

(Karaganda Basin--Coal mines and mining--Safety measures)
(Mine gases)

IVANOV, V.A.; YATSENKO, I.S.; PODPAL'NYY, V.N.

Development by hard heading of spontaneously inflammable flat and inclined seams. Bezop. truda v prom. 8 no.12:6-10 D '64.
(MIRA 18:3)

1. Glavnyy inzh. voyenizirovannoy gornospasatel'noy chaasti Karagandinskogo soveta narodnogo khozyaystva (for Ivanov).
2. Zamestitel' glavnogo inzhenera kombinata Karagandaugol' (for Yatsenko).
3. Starshiy inzh. otдела tekhniki bezopasnosti kombinata Karagandaugol' (for Podpal'nyy).

YATSENKO, I.T.

Following the example of Valentina Gagonova. Vest. svyazi 22
no.1:7 Ja '62. (MIRA 14:12)

1. Nachal'nik Sorokinskoy kontory svyazi Altayskogo kraja.
(Telecommunication Employees)

YATSENKO, K.

"Tone regulation."

So. Radio, Vol. 7, p. 63, 1952

DUDKO, Georgiy Mikhaylovich; YATSENKO, Konstantin Ivanovich;
PINCHUK, A.P., red.; ~~SAAK'YAN, Yu.A., red. izd-va;~~
BOROVINSKAYA, L.M., tekhn. red.

[How to make articles from metal sheets, sections, and
pipes] Kak izgotovit' detali iz lista, profilei i trub.
Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1963. 81 p.
(MIRA 17:3)

NAGORSKAYA, N.D.; MOLCHANOVA, L.V.; RAYEVSKAYA, M.V.; NOVOSELOVA, A.V.;
FRIDLYANDER, I.N.; YATSENKO, K.P.; ROGOVA, L.K.

Crystallization in the system Be - Nb. Metalloved. 1 term.
obr. met. no. 6:12-15 Je '64. (MIRA 17:7)

1445. A method of greatly increasing the life of a
cracked couplant. The method consists in
cracking the couplant in a vacuum induction furnace at 1,200-1,600 C. and in the laboratory of
crack severely during the first melt and usually withstand only 1-3 melts. It was found
that the cracked couplant can be used for a further 100 melts if this was observed in a

AKOPOV, Igor' Artashesovich; BOBRISHCHEV-PUSHKIN, Dmitriy
Mikhaylovich; PROKOF'YEVA, Anna Kuz'minichna; YATSENKO,
Konstantin Petrovich; AL'TMAN, M.B., doktor tekhn. nauk,
retsenzent; IL'IN, O.A., inzh., retsenzent; YAKOVLEVA,
V.I., red.

[Industrial safety in working with beryllium and its alloys]
Bezopasnost' truda pri rabote s berilliem i ego splavami.
Moskva, Izd-vo "Mashinostroenie," 1964. 106 p. (MIRA 17:6)

L 23872-65 EWT(m)/EPF(n)-2/EPR/EWP(t)/EWP(b) Ps-4/Pu-4 IJP(c) JD/
 ACCESSION NR: AT5002775 JG/MLX ^{2c} 5/0000/64/000/000/0172/0175

AUTHOR: Nagorskaya, N. D.; Simanov, Yu. P. (Deceased); Nikolayeva, V. V.; Novoselova, A. V.; Fridlyander, I. N.; Yatsenko, K. P.; Savostin, A. P.

TITLE: Investigation of the interaction of beryllium with rhenium

SOURCE: Vsesoyuznaya soveshchaniya po probleme reniya, 2d, Moscow, 1962. Reniy (Rhenium); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 172-175

TOPIC TAGS: beryllium, rhenium, beryllium rhenium system, beryllium alloy, rhenium containing alloy, microstructure, hardness

ABSTRACT: The microstructure and hardness of cast, annealed, and quenched Be-Re alloys containing up to 43 wt (3.79 at)% Re have been investigated. The alloys were induction melted from 99.5% pure Be and 99.95% pure Re. Microstructure examination showed that alloys at the investigated portion of the Be-Re system crystallize according to eutectic type diagrams. In hypoeutectic alloys the grains of Be-base solid solution are contained in a binary eutectic. In the eu-

Cord 1/20

L 23872-65

ACCESSION NR: AT5002775

0
tactic which contains 8.8 wt% (0.45 at%) Re, the γ -phase based on Be_{20}Re compound forms a finely branched network. The primary formations of the γ -phase in hypereutectoid alloys are scattered within the solid solution of Be. In the investigated alloys Be is present in the form of the α -modification and in an f.c.c. γ -phase on a Be_{20}Re base which has a theoretical Re content of 50.78 wt%. The solubility of Re in Be is less than 1.0 wt% at the eutectic temperature, and less than 0.7 wt% at 600C. The cast alloys containing 2—12% Re have a considerably higher hardness than that according to the additivity rule, which is ascribed to the presence of mechanical stresses in the finely branched eutectic crystallized under conditions of rapid cooling. As the amount of the eutectic decreases and the amount of the γ -phase increases, the hardness of the alloys drops, and in alloys containing more than 12% Re it is equal to the mean arithmetic value of the hardnesses of individual phases. Orig. art. has: 2 figures and 1 table.

[MS]

ASSOCIATION: none

Card 2/3

TOPIC TAGS: aluminum alloy, complex aluminum alloy, beryllium

Card 1/4

and steels. These alloys can be used at temperatures up to 500°C, they have a tensile strength of 30—36, 20—34, 12—16, and 3—8 kg/mm² at 200, 300, 400, and 500°C, respectively; the corresponding figures for elongation are 11—35, 9—30, 7—37, and 4—31%. At 20°C, work-

alloy. Annealing of work-hardened sheets at a temperature above 1100

17. For a copy of sheet 107102.

YATSENKO, K.R.

~~Noted in the original document.~~

Statistics on agricultural injuries. Sov. med. 18 no.7:44 J1 '54.

1. Iz Kuzedeyevskoy rayonnoy bol'nitsy (glavnyy vrach L.M.Poltaratskaya) Kemerovskoy oblasti)

(WOUNDS AND INJURIES

*agriculture, statist., Russia)

(AGRICULTURE

*traumatism, Russia, Statist.)

YATSENKO, K.R.

Treatment of snakebites in children. Sov.med. 22 no.11:127-129
N'58 (MIRA 11:11)

1. Iz khirurgicheskogo otdeleniya Kuzedeyevskoy rayonnoy bol'nitsy
Kemerovskoy oblasti (glavnyy vrach N.F. Dolomanova).
(SNAKE BITES, ther.
in child (Rus))

YATSENKO, K.R.

Double knife wound of the heart. Khirurgia 35 no.10:115-116 O '59.
(MIRA 12:12)

1. Iz khirurgicheskogo otdeleniya Kuzedeyevskoy rayonnoy bol'nitsy
Kemerovskoy oblasti.
(HEART wounds & injuries)

YATSENKO, K. S.

YATSENKO, K. S. - "On changes in the hili in certain heart diseases as a
diagnostic indication of inefficiency of blood circulation".
Gor'kiy, 1955. Gor'kiy State Medical Inst Imeni S. M. Kirov.
(Dissertation for the Degree of Candidate of Medical Science.)

SO: Knizhnaya Letopis', No. 43, 22 October 1955. Moscow

EPSHTEYN, Sh. I.; YATSENKO, K.S.

Two Local cases of episthorosis in Astrakhan. Med. paraz. i paraz. bol.
27 no.4:494-495 J1-Ag '58. (MIRA 12:2)

1. Iz parazitologicheskogo otdela basseynovoy sanitarno-epidemiologicheskoy
stantsii Nizhne-Volzhskogo vodzdravotdela (zav. otdela Sh. I. Epshteyn)
i kliniki propedeviki vnutrennikh bolezney Astrakhanskogo gosudarstvennogo
meditsinskogo instituta (zav. klinikoy V.D. Iamev).

(TREMATODE INFECTIONS, case reports,
episthorosis (Rus))

KHALFEN, E.Sh., doktor med.nauk; YATSENKO, K.S., dotsent; KHAMPIYEV, A.Kh.

Mathematical evaluation of the prognosis in patients with
myocardial infarct. Sov.med. 28 no.4:151-154 Ap '65. (MIRA 18:6)

1. Gospi'tal'naya terapevticheskaya klinika (zav. - doktor med.
nauk E.Sh.Khalfen) Astrakhanskogo meditsinskogo instituta.

KHALFEN, E.Sh., doktor med.nauk; YATSENKO, K.S., dotsent; KHAMPIYEV, A.Kh.

Significance of age and sex in evaluating the prognosis in
myocardial infarction. Azerb.med.zhur. 42 no.1:60-63 Ja
'65. (MIRA 18:5)

1. Iz kafedry gosital'noy terapii (zav. - doktor med.nauk E.Sh.
Khalfen) Astrakhanskogo gosudarstvennogo meditsinskogo instituta
(rektor - dotsent I.N.Alamdarov).

ACC NR: AP7007721

SOURCE CODE: UR/0188/67/000/001/0043/0048

AUTHOR: Mamedli, R. M.; Solodar', G. G.; Yatsenko, L. A.

ORG: none

TITLE: Experimental study of a frequency multiplier based on a two-stage traveling-wave tube

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 1, 1967, 43-48

TOPIC TAGS: traveling wave tube, frequency multiplication

ABSTRACT: Results of an experimental study of a traveling-wave tube frequency multiplier with input and output frequencies between 3000 and 5000 MHz are given. The multiplier (see Fig. 1) consists of an electron gun, two helical-type delay structures separated by a drift space, and a collector. Both helices are impedance-matched to the inputs and the outputs with waveguides such

Card 1/2

UDC: 621.374.4

ACC NR:AP7007721

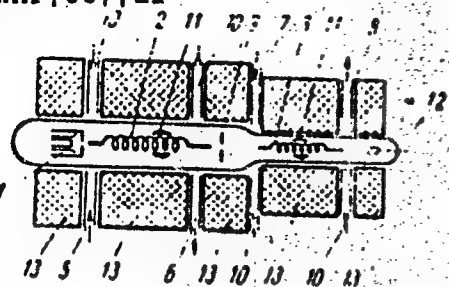


Fig. 1. Frequency multiplier

- 1 - Electron gun; 2 - first helix;
- 3 - second helix; 4 - collector;
- 5 - input waveguide to the first stage; 6 - output waveguide from the first stage;
- 7 - input waveguide to the second stage; 8 - output waveguide from the second stage;
- 9 - diaphragm;
- 10 - tuning plunger; 11 - local absorbers;
- 12 - glass tube; 13 - focusing solenoid coils.

that the VSWR does not exceed 1.6. The diameters of the first and second helices are 2.5 mm and 1.06 mm, respectively. A diaphragm is used to reduce the diameter of the electron beam in the transition between the first and the second helix. The intensity of the longitudinal magnetic field is adjustable and can reach values of up to 1000 G. The multiplier has a large conversion factor (30 db) for input frequencies in the 2900—3200-MHz range. The maximum output power of the multiplier is of the same order as that of the second stage of the tube operating as an amplifier. The high conversion factor and wide range of operating frequencies of the multiplier enhance its value in radio equipment application. Orig. art. has: 6 figures. [IV]

SUB CODE: 09/ SUEM DATE: 8Jul65/ ORIG REF: 002/ OTH REF: 001/
 SOV REF: 002/ ATD PRESS: 5117
 Card 2/2

YATSENKO, L.V., inzh.

Assembly of an overhead crossing as a self-supporting pipe.
Stroi. truboprov. 7 no.10:17-18 0 '62. (MIRA 15:11)

1. Institut Stavropol'krayproyekt, Stavropol'.
(Gas, Natural—Pipelines)

BOYKO, N.; YATSENKO, M.; LIZOGUB, M.; GLUSHKO, Ye.; MARTYNNENKO, N.

In the progressive rural savings banks. Fin. SSSR 21 no.12:68-72
D '60. (MIRA 13:12)

1. Kontroler sberagatel'noy kassy sela Medvezh'ye Talayevskogo rayona (for Boyko). 2. Kontroler sberkassy sel. ... raylovka (for Yatsenko). 3. Kontroler sberkassy sela Osoyevka Krasnopol'skogo rayona (for Lizogub). 4. Kontroler sberkassy sela Khoruzhevki Nedrigaylovskogo rayona (for Glushko). 5. Kontroler sberkassy Akhtyrskogo rayona No.2833/Q1 (for Martynenko).
(Savings banks)

L 2108-66 EWT(1)/FS(v)-3 DD

ACCESSION NR: AP5024162

UR/0238/65/011/004/0516/0519

AUTHOR: Yatsenko, M. I.

TITLE: The effect of microwaves on the absorptive capacity of the synovial membrane of the knee joint when the spinal cord is transected

SOURCE: Fiziologichnyy zhurnal, v. 11, no. 4, 1965, 516-519

TOPIC TAGS: microwave, biological effect, radiophosphorus, synovial membrane, knee joint absorption, CNS

ABSTRACT: Radioactive phosphorus absorption in the knee joint was studied under the effects of UHF (2307 mc, 12.6 cm, 40 w). Absorption was studied in normal animals and those with severed spinal cords. Radioactive phosphorus (22.5 mci) was injected using x-ray control. The tests showed that the absorptive function of a normal joint increased when exposed to microwaves. Transection of the spinal cord retarded absorption under normal conditions, but under the effect of UHF, the absorptive activity of the synovial membrane was elevated.

[CD]

Card 1/2

L 2108-66

ACCESSION NR: AP5024162

ASSOCIATION: Makiyiv's'ka fizioterapevtychna likarnya im. S. M. Kirova (Donets'ka oblast') (Makeyev Physiotherapeutic Hospital, Donetsk Region); Kafedra fiziologiyi lyudyny i tvaryn Odes'kogo derzhavnogo universytetu im. I. I. Mechnykova (Department of Human and Animal Physiology, Odessa State University)

SUBMITTED: 28Nov64

ENCL: 00

SUB CODE: LS

NO REF SOV: 016

OTHER: 003

ATD PRESS: 4113

Card 2/2

YATSENKO, M.I.

Absorption of radioactive phosphorus from the knee joint cavity
in case of inflammation and during the action of some physical
agents on it. Fiziol. zhur. [Ukr.] 7 no.5:701-707 S-0 '61.
(MIRA 14:9)

1. Makeyev Physiotherapeutic Hospital, Stalino Region (Donets
Basin) and the Department of Human and Animal Physiology of
Odessa State University.

(ABSORPTION (PHYSIOLOGY)) (PHOSPHORUS--ISOTOPES)
(KNEE--DISEASES)

L 32715-66 EWT(1) DD

ACC NR: AP6019199

SOURCE CODE: UR/0238/66/012/003/0377/0381

AUTHOR: Yatsenko, M. I.

ORG: Makeyivka Physiotherapeutic Hospital im. Kirov, Donets Oblast (Makiyivka fizioterapevtychna likarnya); Department of Human and Animal Physiology, Odessa University im. I. I. Mechnykov (Kafedra fiziolohiyi lyudyny i tvaryn Odes'koho universytetu)

TITLE: ²Effect of microwaves on the absorptive capacity of the knee joint under the effect of atropine and carbocholine

SOURCE: Fiziolohichnyy zhurnal, v. 12, no. 3, 1966, 377-381

TOPIC TAGS: rabbit, microwave, animal physiology, radioisotope, phosphorus, knee

ABSTRACT: The author studies the effect of microwaves, atropine, and carbocholine on radioactive phosphorus absorption in the knee joint. Fifty-four rabbits weighing from 2 to 3 kg were used in the experiments. The isotope used was in the form of disodium hydrogen phosphate ($\text{Na}_2\text{HP}^{32}\text{O}_4$); 22.5 μc was injected, and the activity of the blood drawn from a vein in the ear was determined at constant time intervals of 3, 5, 10, 15, 20, 30, 45, 60, 90, and 120 min. The results show that the absorptive function appears 3 min after injection and continues to rise until it reaches a maximum of 15.5 at% after 60 min. The absorptive function of the knee-joint cavity increases noticeably

Card 1/2

L 32715-66

ACC NR: AP6019199

under irradiation with 40-w microwaves. In 5 min the amount of radioactive phosphorus absorbed was 23.6% as compared to 14.7% found in the control group. The injection of antropline with irradiation shows 13.8% absorption of radioactive phosphorus after 20 min, which increases to 21.3% when irradiation is used in conjunction with antropline. This indicates that the combined action of atropine and microwaves greatly increases the absorptive function of the knee-joint cavity. Injection of carbocholine stimulates the parasympathetic nervous system with a resultant increase in absorption of radioactive phosphorus. After 10 min 16.3% had been absorbed as compared with 12.9% found in the control group. Maximum absorption of 27.1% was reached after 30 min while the control group showed 15.6% absorption. However, irradiation of the knee-joint cavity with microwaves after injection of carbocholine reduces absorption to 1.3% as compared to 12.4% found in the control group. [28]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 013/ OTH REF: 006/ ATD PRESS: 5024

Card 2/2 05

TITLE: The effect of microwaves on absorption processes from the cavity of the knee joint

Prilozheniye k zhurnal'noy stat'ye "Kriticheskiye zametki k knige A. A. Zhdanovskogo 'Kriticheskiye zametki k knige A. A. Zhdanovskogo'". Zhurnal "Fizicheskaya khimiya", 1964, no. 6, 793-797.

RECEIVED
JAN 10 1964

Figure 1. The effect of the concentration of the *Agrobacterium* strain on the transformation efficiency of *Agrobacterium* strain.

substituted phosphoric acid from the cavity of the knee joint. Field in-

~~figures. Orig. art. has: 1 figure~~

ASSOCIATION: Makeyevskaya fizioterapevticheskaya lechebnitsa imeni

Cord $1/2$

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001962310003-6

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001962310003-6"

DOVGANOVSKIY, N.P.; KLOCHKOV, G.D.; NIKOLAYEV, I.A.; SINEL'NIKOV, D.Ye.;
YATSENKO, M.I.

Application of electronic computers in the calculation of
transient and steady processes in some types of electric
circuits. Trudy RIIZHT no.44:201-215 '64.

(MIRA 19:1)

YATSENKO, M.I.

Studies of the effect of artificial hydrogen sulfide baths on processes of absorption from the knee joint cavity. Vop. kur., fizioter. i lech. fiz. kul't. 26 no.6:532-534 N-D '61. (MIRA 15:1)

1. Iz Makeyevskoy fizioterapevticheskoy lechebnitsy (glavnyy vrach M.I.Yatsenko) i kafedry fiziologii cheloveka i zhivotnykh (zav. - prof. R.O:Faytel'berg) Odesskogo gosudarstvennogo universiteta imeni I.I.Mechnikova.

(KNEE) (MINERAL WATERS, ARTIFICIAL)
(ABSORPTION (PHYSIOLOGY))

YATSENKO, M.I.

Effect of microwaves on the absorptive capacity of the synovial membrane of the knee joint following the section of the spinal cord. Fiziol.zhur. [Ukr.] 11 no.4:516-519 J1-Ag '65.

(MIRA 18:10)

1. Makeyevskaya fizioterapevticheskaya lechebnitsa, Donetskaya oblast', i kafedra fiziologii cheloveka i zhivotnykh Odesskogo gosudarstvennogo universiteta im. I.I.Mechnikova.

32529

S/065/61/000/012/002/005
E075/E135

11.9yp^o also 1583 2209

AUTHORS: Rudenko, M.G., Sobolev, Yu.P., Yatsenko, M.S., and Starikova, L.V.

TITLE: Synthesis and properties of esters of arylstearic acids

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.12, 1961, 7-11

TEXT: Some esters of arylstearic acids were synthesized and their properties investigated for the first time to ascertain the feasibility of their use as synthetic lubricating oils. Phenyl, o-xylyl and p-xylylstearic acids were obtained by condensing commercial oleic acid with the respective hydrocarbons in the presence of $AlCl_3$. The ratio of weights of the hydrocarbons to that of oleic acid was 5:1, $AlCl_3$ and oleic acids were used in equimolar quantities. The reaction was carried out at 80 °C for 5-6 hours. The reactions with naphthalene and diphenyl ether were conducted in solution in trichlorobenzene. The acids were purified by vacuum distillation. The physical constants of

Card 1/3

X

Synthesis and properties of esters...

32529
S/065/61/000/012/002/005
E075/E135

phenoxyphenylstearic and o-xylylstearic acids were different from those reported in the literature. The acids were esterified with methyl-, benzyl- and 2-ethylbenzyl alcohols. Almost all the esters solidify from -40 to -60 °C. Benzyl esters of naphthyl- and phenoxyphenylstearic acids solidify at -35 °C, whilst their methyl esters solidify at -40 and -50 °C respectively. Methyl ester of phenylstearic acid solidifies at -26 °C and the benzyl ester at -50 °C, although the viscosity of the latter ester is much higher than that of the methyl ester (19.32 and 11.38 cs at 50 °C respectively). The relatively low solidification temperatures of the esters are partly due to the fact that they are mixtures of different isomers. Viscosity of the esters increases with the carbon number of the alcoholic group and the molecular weight of the hydrocarbon substituent, with the exception of the esters of phenoxyphenylstearic acid which have lower viscosities than the naphthylstearic acid esters. The viscosities range from 11.4 to 51.1 cs at 50 °C and 3.7 to 9.9 cs at 100 °C. Thermal stability of the esters was investigated by passing air through the esters heated at 300 °C at the rate of

Card 2/ 3

X

32529

Synthesis and properties of esters.. S/065/61/000/012/002/005
E075/E135

5 ml/min for 10 hours. Methyl ester of phenoxyphenylstearic acid and benzyl ester of p-xylylstearic acid had the highest oxidation stability; however, the latter showed an excessive corrosivity towards steel. The two esters responded well to additive АЗНИИ-10 (AzNII-10), which lowered the evaporation losses and eliminated the corrosive tendencies. It is concluded that these esters could be used as lubricating oils at 300 °C with suitable additives. There are 3 tables and 9 non-Soviet-bloc references. The four most recent English language references read as follows:
Ref.5: R.H. McKee, H.B. Faber, US Pat. 1972568 (1934).
Ref.6: A.J. Stirton, B.F. Peterson. Ind.Eng.Chem., v.31, 856, 1939.
Ref.7: W. Kimura, T. Omura, H. Taniguchi. Ber., v.71, 2686, 1938.
Ref.8: A.J. Stirton, B.B. Schaeffer, A.A. Stavitzke, J.K. Weil, C. Waldo. J.Amer. Oil Chem.Soc., v.25, 365, 1948.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR
(Institute of Petrochemical Synthesis, AS USSR)

Card 3/3

X

SVICHINSKIY, Nikolay Nikolayevich; YATSENKO, Mikhail Yakovlevich;
FEDOROV, G.K., red.; FEDOROV, V.P., red.izd-va; LAVRENOVA,
N.B., tekhn.red.

[Preparation of ships for their inspection by the Register
of the U.S.S.R.] Podgotovka sudov k osvidetel'stvovaniu
Registrom SSSR. Moskva, Izd-vo "Morskoi transport," 1960.
96 p. (MIRA 13:11)

(Ships--Registration and transfer)

SOV/118-58-1-2/16

AUTHORS: Dmitrenko, M.T., Kozyrev, V.P., Chernichenko, P.M., and
Yatsenko, N.A., Engineers

TITLE: The Mechanization of Labor in Coke By-Product Plants (Mekhanizatsiya truda na koksokhimicheskikh zavodakh)

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, Nr 1, pp 6-10 (USSR)

ABSTRACT: In all newly erected and rebuilt plants of the coke by-product industry, car dumpers, mostly of the stationary rotary type have been set up. All operations in coal depots are fully mechanized; they are supplied with one or several belt conveyers and a bulldozer for the clearing of the depot area. The receiving capacity of a normal coal depot is between 800 and 900 tons per hour, the issuing capacity between 370 and 385 tons per hour. The depot is served by 6 men. During recent years many coke by-product plants have introduced automatic production control and remote control of equipment. All valves at coal and coke loading points are supplied with electric relay mechanisms of the types IMT 25/120 and IMT 100/120. The following additional mechanization means are used; automatic blocking of electric motors

Card 1/2

The Mechanization of Labor in Coke By-Product Plants

SOV/118-58-1-2/16

in case of emergency; mechanisms for the operating of coal tower shutting devices; mechanisms for the cleaning of coke oven doors; automatic coke drawers, etc.
There are 6 diagrams.

1. Coke--Processing
2. Industrial plants--Equipment
3. Industrial plants--Control systems

Card 2/2

POLYAKOV, I.I.; YATSENKO, N.A.

Coke sorting for the production of two classes of metallurgical
coke. Koks i khim. no.11:41-43 '62. (MIRA 15:12)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy
koksokhimicheskoy promyshlennosti.
(Coke)

9.2180 (1162, 1331)
9.2110 (1385, 1043, 1153)

85022

S/048/60/024/010/031/033
B013/B063

AUTHORS: Strelets, P. L., Serova, I. A., Yatsenko, N. D., and
Markus, P. L.

TITLE: Characteristics of the Technology and Properties of Some
Piezoelectric Ceramic Materials 11

PERIODICAL: ¹⁵ Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,
Vol. 24, No. 10, pp. 1296 - 1299

TEXT: Production conditions of the following piezoelectric compounds
were examined: $95\% \text{BaTiO}_3 - 5\% \text{CaTiO}_3 - 0.75\% \text{CaCO}_3$; $40\% \text{BaNb}_2\text{O}_6 - 60\% \text{PbNb}_2\text{O}_6$;
 $55\% \text{PbZrO}_3 - 45\% \text{PbTiO}_3$. The conventional ceramic process served as the
basis, but it was varied for each new composition according to its
specific properties. The solid $\text{BaTiO}_3 - \text{CaTiO}_3 - \text{CaCO}_3$ solution was syn-
thesized directly from a mixture of corresponding salts and oxides at
 1300°C . When selecting the burning conditions, one must take the pre-
scribed temperature into account, since to exceed it would mean to

Card 1/4

85022

Characteristics of the Technology and
Properties of Some Piezoelectric Ceramic
Materials

S/048/60/024/010/031/033
B013/B063

deteriorate the piezoelectric and dielectric properties of the material concerned. The elements were polarized at a temperature near the Curie point (118°C) at a field strength of 0.8 kv mm^{-1} in the air or in an organosilicon liquid of the type "КАЛОРИЯ 2" (Kaloriya 2). The production process of $\text{BaNb}_2\text{O}_6\text{-PbNb}_2\text{O}_6$ is simpler than that of barium titanate.

This solid solution was likewise directly synthesized from the corresponding salts and oxides by mixing and subsequent burning at 1000°C . Piezoelectric and dielectric properties of the elements are strongly influenced by the chemical composition of the niobium pentoxide used. Table 1 gives the properties of some specimens prepared with different impurity concentrations out of eight experimental sets of niobium pentoxide. The optimum values of the properties of piezoceramic elements can be held to be dependent upon a definite ratio of the impurities contained in niobium pentoxide. A great advantage of this new material is the fact that molded elements can be burned at relatively low temperatures ($1260 \div 1280^{\circ}\text{C}$). Moreover, no specific medium is necessary in the final burning, due to a low thermal dissociation of lead

Card 2/4

85022

Characteristics of the Technology and
Properties of Some Piezoelectric Ceramic
Materials

S/048/60/024/010/031/033
B013/B063

metaniobate at $1000 \div 1300^{\circ}\text{C}$. The mentioned material polarized at $170 \div 180^{\circ}\text{C}$ and $3 \div 5 \text{ kv mm}^{-1}$. The production process of the solid $\text{PbZrO}_3\text{-PbTiO}_3$ solution differs only little from the barium titanate synthesis. Nevertheless, due to a considerable volatility of lead oxide at over 1000°C , the process is not exempt from difficulties. Fig.1 gives the dependence of the volatility of lead oxide on temperature, on the duration of treatment, on the thickness and volume of the specimen. The study of the character of the lead oxide volatility has made it possible to calculate the excess quantum for production conditions in the practice, that must be added prior to the ultimate burning, in order to obtain piezoceramic elements of desired composition. Table 2 indicates Curie points of the examined compositions as compared with barium titanate. Fig.2 shows temperature dependences of the main parameters of the new materials and barium titanate. The course of the curves speaks in favor of the new piezoelectric materials. G. A. Smolenskiy is mentioned. The present paper was read at the Third Conference on

Card 3/4

Characteristics of the Technology and
Properties of Some Piezoelectric Ceramic
Materials

85022

S/048/60/024/010/031/033
B013/B063

Piezoelectricity, which took place in Moscow from January 25 to 30,
1960. There are 2 figures, 2 tables, and 4 references: 2 Soviet and
1 Canadian.

Card 4/4

S/0181/64/006/003/0790/0795

ACCESSION NR: AP4019840

AUTHORS: Isupov, V. A.; Strelets, P. L.; Serova, I. A.; Yatsenko, N. D.;
Shirobokikh, T. M.

TITLE: Peculiarities of ferroelectric phase transitions in solid solutions of the
system $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ -- PbTiO_3

SOURCE: Fizika tverdogo tela, v. 6, no. 3, 1964, 790-795

TOPIC TAGS: ferroelectric, phase transition, solid solution, Vegard law, dielec-
tric polarization, crystal lattice structure

ABSTRACT: The authors' study stems from lack of information on the effect of
diffusion of phase transitions on ferroelectric properties and from disagreement
concerning the causes of the relaxation nature of dielectric polarization
observed in ferroelectrics with diffused phase transitions. While investigating
the dielectric properties and crystal structure in the system $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ --
 PbTiO_3 , the authors discovered a number of relationships. Their studies confirm
the view that the diffusion of ferroelectric phase transitions declines with

Card 1/2

ACCESSION NR: AP4019840

increase in spontaneous polarization and spontaneous deformation of the solid solutions. At room temperature, the boundary between rhombohedral and tetragonal phases lies in the region of 0-10% PbTiO_3 . The dependence of unit-cell volume on component concentrations deviates considerably from the Vegard law. The Curie point of the examined solid solutions depends in nonlinear fashion on the concentration of PbTiO_3 , reaching a minimum at a content of about 10 mol%. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 09Sep63

DATE ACQ: 31Mar64

ENCL: 00

SUB CODE: SS

NO REF SOV: 013

OTHER: 002

Card 2/2

SA: IANTSEV, Petr Leont'yevich; SAVCHENKO, F.T., retsenzent; YATSENKO,
N.F., retsenzent; MAZURENKO, K.D., red.; PESKOVA, L.N., red.;
—BOBROVA, Ye.N., tekhn. red.

[Geography of the transportation systems of the U.S.S.R.] Ge-
ografiiia putei soobshcheniia SSSR. Izd. 2., perer. i dop. Mo-
skva, Transzheldorizdat, 1962. 233 p. (MIRA 15:10)
(Transportation)

L 7031-66 ETC(m) WW
ACC NR: AP5026818

SOURCE CODE: UR/0286/65/000/017/0095/0095

AUTHOR: Yatsenko, N. I.

ORG: none

TITLE: A pressure regulator. Class 42, No. 174451

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 95

TOPIC TAGS: pressure regulator, pressure measuring instrument

ABSTRACT: This Author's Certificate introduces a pressure regulator which contains an electrohydraulic converter and slide valves with different effective end areas. A unique relationship is maintained between the input power signal and the output pressure by pairing the slide valves and connecting the cavities above and below each slide valve by a channel which passes through the valve. The valve has a chamber with different effective end areas which is connected to the working chamber.

UDC: 621-531

SUB CODE: IE/

SUBM DATE: 23Oct61/

ORIG REF: 000/

OTH REF: 000

Card 1/1

SOV-113-58-8-9/21

AUTHORS: Yatsenko, N.N., Candidate of Technical Sciences and Sozon-
tov, P.A.

TITLE: The Dynamometric Truck of the "DM-21" Type (Dinamometriches-
kaya mashina DM-21)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 8, pp 27-30 (USSR)

ABSTRACT: A new model of a dynamometric machine of the "DM-21" type
has been designed. It consists of a chassis of the "ZIL-
151" type car, on which an electric motor of the "DK-202 B"
type, manufactured by the "Dynamo" Plant is installed. A
trolley-bus traction motor is used as a brake generator. A
trolley-bus starter-rheostat of the "KF-2A-1" type is used
as a resistance. At the rear of the driver's cabin, a stand-
ard covered hood is installed. The front of it contains the
"YaAZ-204 V" type engine and a second "DK-202 B" type elec-
tric motor, both installed on a separate chassis. A hydraulic
dynamometer is installed in the rear part of the frame. The
total weight of the "DM-21" is about 10,000 kg and the maxi-
mum brake-torque is 36 kgm. Figure 7 shows the traction
characteristics of the "YaAZ-214" and "GAZ-63" type cars.
Figure 9 shows the traction characteristic of the "YaAZ-214"

Card 1/2

The Dynamometric Truck of the "DM-21" Type

SOV-113-58-8-9/21

type car when taken with the "DM-21". The "DM-21" type machine can also be utilized for figuring economical characteristics of cars and for the analysis of the car-roadability on soft ground and snow. There are 6 diagrams, 4 graphs, 1 photo and 3 Soviet references.

1. Automobile industry--USSR 2. Trucks--Design 3. Trucks--Test methods

Card 2/2

KLASSEN, V.I.; PIKKAT-ORDYNSKIY, G.A.; VENKOVA, M.D.; ZHENDRINSKIY, A.P.;
MATVEYENKO, N.V.; GORODETSKIY, M.I.; YEGIZAROV, A.A.;
PECHENKIN, V.V.; SEREGIN, N.V.; KEPP, G.A.; YATSENKO, N.N.

Industrial testing of an ejector-type flotation machine for
the flotation of ores. TSvet. met. 36 no.4:7-13 Ap '63.
(MIRA 16:4)

(Flotation—Equipment and supplies)

YATSENKO, N.N.; ROMANOV, N.R.

Facilitating the unloading and increasing the useful capacity of
bunkers for crushed ores. Biul.tekh.-ekon.inform.Gos.nauch.-issl.
inst.nauch,1 tekhn.inform. no.12:3-5 '63. (MIRA 17:3)

SHANIN, S.A.; BALABAY, F.I.; KONONENKO, D.F.; MIKULIN, G.I. [Mykulin, H.I.];
BOROVSKAYA, N.V. [Borovs'ka, N.V.]; SHINKEVICH, A.P. [Shynkevych, A.P.];
LIBERZON, L.M.; AMELIN, A.G. [Amelin, A.H.]; BURYAK, K.A.; FECHONZIN,
V.V. [Plechonkin, V.V.]; YATSENKO, N.N.; GAL'PERIN, N.I. [Hal'perin,
N.I.]; FEBALK, V.L.; CHEKHOMOV, Yu.K.

Inventions and improvements; certificates of inventions, Khim.prom.
[Ukr.] no.2:62-64 Ap-Je '65. (MIRA 18:6)

YATSENKO, N.N., Kand.tekhn.nauk

Improving the suspension system of motor vehicles. Avt.prom. no.7:
6-7 J1 '60. (MIRA 13:7)

(Motor vehicles--Springs)

YATSENKO, N.N., kand.tekhn.nauk

"Motor vehicle suspension system and its vibrations" by R.V.
Rotenberg. Reviewed by N. N. Iatsenko. Avt.prom. 27 no.6:47
Je '61. (MIRA 14:6)

(Motor vehicles--Springs)
(Rotenberg, R.V.)

YATSENKO, N.N.; ROMANOV, N.R.

Certain examples of making an efficient use of the segregation
of crushed ore. Izv. vys. ucheb. zav.; tsvet. met. 8 no.4:
34-38 '65. (MIRA 18:9)

1. Severokavkazskiy gornometallurgicheskiy institut i Balkhashskiy
gornometallurgicheskiy kombinat.

SILAYEV, A.A.; YATSENKO, N.N., kand. tekhn.nauk, retsenzent;
NAKHIMSON, V.A., red. izd-va; DEMKINA, N.F., tekhn. red.

[Spectral theory of the cushioning of transport vehicles]
Spektral'naya teoriya podressorivaniya transportnykh ma-
shin. Moskva, Mashgiz, 1963. 166 p. (MIRA 16:6)
(Motor vehicles—Springs)

PIRKOVSKIY, Yu.V.; VATSENKO, N.N., kand.tekhn.nauk

Effect of the structural design of the drive for front driving
axles of motor vehicles on their tractive and economic char-
acteristics. Avt.prom. 29 no.1:15-19 Ja '63. (MIRA 16:1)
(Motor vehicles--Transmission devices)

CHAYKOVSKIY, I. Ye.; YATSENKO, N. P.

Manufacture of glued bent frames for chairs. Der.prom. 9 no.10;8-
9 0 '60. (MIRA 13:10)

(Woodworking machinery)

YATSENKO, N.P.; LEPESKINA, L.K.

Norms for the consumption of particle and wood fiberboards in
the manufacture of furniture. Der.prom. 11 no.5:4 My '62.
(MIRA 15:5)

1. Tsentral'nyy nauchno-issledovatel'skiy institut fanery i
mebeli.

(Furniture industry) (Hardboard)

YATSENKO, N.P.; LEPESKINA, L.K.; BRENER, M.I., red.

[Increasing the output of parts from particle board and fiberboard] Uvelichenie poleznogo vykhoda detalei iz struzhechrykh i drevesno-voloknistykh plit. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issl. po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyv. promyshl. i lesnomu khoz. 1963. 21 p. (MIRA 17:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli (for Yatsenko, Lepeskina).

TAYTS, Ye.M., doktor tekhn. nauk; SHVARTS, S.A., kand. tekhn. nauk[deceased]; PEYSAKHZON, I.B., inzh.; GEL'FER, M.L., inzh.; DMITRIYENKO, M.T., inzh.; DORFMAN, G.A., inzh.; IZRAELIT, Ye.M., inzh.; KULAKOV, N.K., inzh.; KUSHLYANSKIY, B.S., inzh.; MEYKSON, L.V., inzh.[deceased]; LEONOV, A.S., inzh.; SHVARTS, G.A., inzh.; SHVARTSMAN, I.Ya., inzh.; YATSENKO, N.Ya., inzh.; BABIN, P.P., inzh.; KHANIN, I.M., doktor tekhn. nauk, prof., red.; KOZYREV, V.P., inzh., red.; KUPERMAN, P.I., inzh., red.; LGALOV, K.I., inzh., red.; LEYTES, V.A., inzh., red.; LERNER, B.Z., inzh., red.; POTAPOV, A.G., inzh., red.; SHELKOV, A.K., red.

[By-product coke industry worker's handbook in six volumes]
Spravochnik koksokhimiya v shesti tomakh. Moskva, Metal-
lurgiya. Vol.2. 1965. 288 p. (MIRA 18:8)

YATSENKO, N. Z.

SEROKLINOV, N. P.; YATSENKO, N. Z.

Tanks for retting jute fibers. Tekst.prom.14 no.3:49-50 Mr '54.
(MLRA 7:5)

(Jute)

AUTHOR: Droude, V. L.; Pogoryalyy, O. M.; Goskin, N. S.; Statsenko,
B. V.; Yatsenko, O. F. 65

TITLE: Radiation fluctuations of a pulsed laser 65

L 23457-65

LOCATION: NE 100000000

ELECTRIC MIRRORS WITH A REFLECTION COEFFICIENT CLOSE TO 100 PERCENT
IN THE WAVELENGTH RANGE 0.4-1.0 MICRONS. THE REFLECTION COEFFICIENT INCREASES WHEN THE WAVELENGTH DECREASES.

USSR/Farm Animals. General Problems

Q-1

Abs Jour : Ref Zhur - Biol., No 19, 1958, No 88006

Author : Yatsenko O.Yu.

Inst : Ukrainian Academy of Agricultural Sciences

Title : The Achievements of Zootchnical Science in Ukraine During
the 40 Years of Soviet Power

Orig Pub : Visnik. sil'skogospod. nauk, Ukr. akad. sil'skogospod. nauk,
1958, No 1, 44-54

Abstract : No abstract

Card : 1/1

KLIMOVSKIY, L. [Klymovs'kyi, L.L.]; YATSENKO, P.D.

Automatic doffing truck for conveying oliver rolls from
the breaker card. Leh.prom. no.1;29-30 Jan-Mr'64.

(NIRA 19:1)

SEREDENKO, M.M., kand.ekon.nauk; KUGUSHEV, M.F. [Kuhushev, M.F.]; PRAVDIN, M.V.; POMICHEV, V.I.; ALEKSANDROVA, V.P.; GORODETSKIY, N.I. [Horodets'kyi, N.I.]; DYATLOV, T.I.; KALITA, M.S. [Kalyta, M.S.]; DARAGAN, M.V. [Darahan, M.V.]; RADINA, Yu.M.; VOROB'YEVA, K.T. [Vorobyova, K.T.]; LASTIVKA, N.N.; STARODUBSKIY, R.D. [Starodubs'kyi, R.D.]; YATSENKO, P.F.; MUROMTSEVA, G.M. [Muromtseva, H.M.]; RASNER, S.I.; CHERNYAK, K.I.; KOBILYAKOV, I.I. [Kobyliakov, I.I.]; ALEKSANDROVA, V.O., kand.ekonom.nauk, otv.red.; DEMIDIUK, V.F. [Demydiuk, V.F.], red.; LIBERMAN, T.R., tekhn.red.

[Ways of increasing profits in metallurgical industries] Shliakhy pidvyshchennia rentabel'nosti metalurgiinykh pidpriemstv. Kyiv, Vyd-vo Akad.nauk URSR, 1961. 93 p.

(MIRA 14:6)

1. Akademiya nauk USSR, Kiyev. Institut ekonomiki. 2. Institut ekonomiki AN USSR (for Seredenko, V.P.Aleksandrova, Kalita, Daragan, Radina). 3. Dnepropetrovskiy khimiko-tehnologicheskii institut (for Gorodetskiy, Dyatlov). 4. Dneprodzerzhinskiy metallurgicheskii institut (for Kobilyakov).

(Dnepropetrovsk Province—Steel industry—Costs)

FRCLCVSKIY, P.A.; Prinimali uchastiye: ANDERS, V.R.; REMNEV, V.F.;
BULAKH, Ye.S.; KHURSHUDYANTS, I.K.; YATSENKO, P.G.; TARASOV, A.I.;
IOGANSOHN, A.V.; LULOVA, N.I.; KURDRIYAVTSEVA, N.A.

Kh.L-3 laboratory chromatograph. Khim. i tekh.topl.i masel
6 no.7:44-49 J1 '61. (MIRA 14:6)

1. Spetsial'noye konstruktorskoye byuro po avtomatike v nefte-
pererabotke i neftekhimii.

(Gas chromatography)

Yatsenko, R.D.

Interaction of ethylene oxide with aromatic and heterocyclic amines. Yu. K. Yur'ev, K. Yu. Novitskiy, L. G. Liberov, and R. D. Yatsenko. *Vestnik Khim. UzbSSR*. Uzb. 1953, No. 6, 123-33; *Russk. Zhur. Khim.* 1953, No. 8488. —When ethylene oxide (I) reacts at a high temp. with $2-C_6H_5NH_2$ (II), it yields $2-C_6H_5NHCH_2CH_2OH$ (III); with $PhNH_2$ (IV) it yields $HOCH_2CH_2NHPh$ (V); with $o-C_6H_4NH_2$ (VI), it yields $o-C_6H_4NHCH_2CH_2OH$ (VII); with α -aminopyridine (VIII), it yields 1,2-dihydro-1-(2-hydroxyethyl)-2-iminopyridine (IX); with 2-amino-4-methylthiazole (X), it yields 2-(2-hydroxyethyl)-4-methyl-2-imino-4-thiazoline (XI). When 11 g. I is passed into 71.5 g. II, 100 g. dioxane, 10 ml. alc., and 5 ml. water for 1 hr. at 30-40°, distn. yields 23.1 g. III, b_p 127-8°, m. 62° (from

abs. alc.); picrate, m. 163° (from alc.). The following are similarly obtained: 132 g. V, b_p 154°, n_D²⁰ 1.5320, d₄²⁰ 1.0506, from 121 g. IV in 20 ml. water and 44 g. I upon heating up to 40-60°; 29.5 g. VII, b_p 134.5-35°, n_D²⁰ 1.5360, d₄²⁰ 1.2320, from 81.9 g. VI in 10 ml. alc., 1 ml. water, and 70 g. I at 75-80°; 14 g. IX, b_p 173-4°, m. 112° (from abs. benzene), from 23.5 g. VIII in 5 ml. water and 5.5 g. I with heating to 60°; 6.5 g. XI, b_p 146-8° (in a N stream), n_D²⁰ 1.5716 (picrate, m. 155.5-60°) from 48 g. X in 15 ml. alc. and 1 ml. water and 23 g. I at 60-60°. By hydrolysis of 10 g. IX, 8 g. 1-(2-hydroxyethyl)-2(1H)-pyridinone were obtained, b_p 177-8°, m. 100°. Marjorie Ketner

5(3)

AUTHORS:

Knunyants, I. L., Sterlin, R. N.,
Yatsenko, R. D., Pinkina, L. N.

SOV/62-58-11-11/26

TITLE:

Reactions of Fluoro Olefins (Reaktsii ftorolefinov)
Communication VIII. Reactions of Perfluoro Vinyl Magnesium
Halides (Soobshcheniye 8. Reaktsii
perftorvinilmagniygalogenidov)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
1958, Nr 11, pp 1345-1347 (USSR)

ABSTRACT:

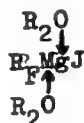
In the present paper the authors demonstrated that by the
activation of magnesium with ethyl bromide and by carrying
out the reaction in ester at -30 to -20° a practically
quantitative consumption of magnesium can be achieved. By
the decomposition of the reaction mass with diluted sulfuric
acid 70 % of trifluoro ethylene could be separated. It was
demonstrated that under the mentioned conditions perfluoro
vinyl bromide and perfluoro vinyl chloride do not react with
magnesium and that they are unchanged after the end of the
reaction. An organomagnesium compound $CF_2=CFMgBr$ in a yield
of up to 45 % could be formed from perfluoro vinyl bromide in
tetrahydro furan. In this case it was not even necessary to

Card 1/3

Reactions of Fluoro Olefins.
Communication VIII. Reactions of Perfluoro Vinyl
Magnesium Halides

SOV/62-58-11-11/26

activate magnesium with ethyl bromide. Apparently the assertion that an intensification of the basicity of the solvent favors the formation of R_FMgJ on the basis of its stabilization in the form of a complex of the



type, is justified. As the result of the processing of $CF_2=CFMgJ$ with solid carbon dioxide in ester solution at -40° and the subsequent decomposition of the reaction mass with 2N sulfuric acid solution perfluoro acrylic acid was obtained in a yield of 40%. Henne (Ref 6) formerly obtained this acid by a complex and very slow method. The found method can be recommended without doubt for preparation. By processing the ester solution of the perfluoro acrylic

Card 2/3

Reactions of Fluoro Olefins.

Communication VIII. Reactions of Perfluoro Vinyl
Magnesium Halides

SOV/62-58-11-11/26

acid with a calculated amount of diazomethane the methyl
ester of perfluoro acrylic acid was obtained. There are
8 references, 1 of which is Soviet.

SUBMITTED: March 4, 1957

Card 3/3

STERLIN, R.N.; YATSENKO, R.D.; KHUNYANTS, I.L.

Reaction of perfluorovinyl magnesium iodide with carbonyl compounds.
Khim. nauka i prom. 3 no.4:540-541 '58. (MIRA 11:10)
(Vinyl compounds) (Carbonyl compounds)

5.3600

77072
SOV/62-59-12-16/43

AUTHORS: Sterlin, R. N., Bogachev, V. E., Yatsenko, R. D.,
Knunyants, I. L.

TITLE: Reactions of Fluoroolefins. Communication 10. Concerning
the Dependence of Chemical Properties of Fluoroolefins
on Polarity

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdelenie khimicheskikh
nauk, 1959, Nr 12, pp 2151-2155 (USSR).

ABSTRACT: 2-Diethylamino-1,2,2-trifluoro-1-bromoethane (I)
(bp 58° at 17 mm) was obtained by shaking perfluorovinyl
bromide with diethylamine, at room temperature, for
2 hours. On hydrolysis of (I) with water, the diethyl-
amide of fluorobromoacetic acid (bp 93° at 4 mm) was ob-
tained in 85% yield. It was shown that the reaction rate
of addition of diethylamine to perfluorovinyl halides
increases with increasing polarity of the olefin molecule.
Diethylamine reacts vigorously with diethylamide of
fluoroacetic acid; it almost fails to react with the
diethylamide of chloroacetic acid, and reacts very slowly

Card 1/2

Reactions of Fluoroolefins. Communication 10.
Concerning the Dependence of Chemical
Properties of Fluoroolefins on Polarity

77072

SOV/62-59-12-16/43

with 2-diethylamino-1,2,2-trifluoro-1-bromo- (or
chloro) -ethane. There is 1 figure; 4 tables; and
5 references, 1 German, 1 U.K., 3 U.S. The 4 U.S.
and U.K. references are: R. N. Haszeldine, J. Chem.
Soc. 4259 (1952), A. Giacomo, R. Swith, J. Am. Chem.
Soc. 77, 774 (1954); G. Rigby, H. Schroeder, U.S.
pat 2409315 (1946); Hurwitz, W. Miller, Abstracts of
Papers 114th Meeting, J. Am. Chem. Soc. 41 (1948).

SUBMITTED: March 31, 1958

Card 2/2

STERLIN, R.N.; PINKINA, L.M.; YATSENKO, R.D.; KNUNYANTS, I.L.

Perfluorovinyl derivatives of arsenic and antimony. Khim.nauka
i prom. 4 no.6:800-801 '59. (MIRA 13:8)
(Arsenic compounds)
(Antimony compounds)

5.3700

77300

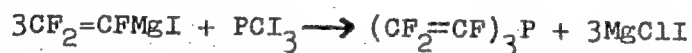
SOV/63-4-6-34/37

AUTHORS: Sterlin, R. N., Yatsenko, R. D., Pinkina, L. N., Knunyants, I. L.

TITLE: Perfluorovinylhalophosphines

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 6, pp 810-811 (USSR)

ABSTRACT: On the basis of the previously investigated (Izv. AN SSSR, 1959, Nr 8) reaction of perfluorovinylmagnesium iodide with SiCl_4 , the authors obtained similarly new tri-(trifluorovinyl)-phosphine (yield 35.4%; bp 99-101° C; $n_D^{23.5}$ 1.3909) in the reaction:



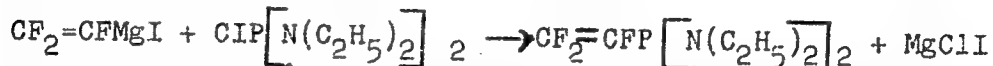
It was also shown that amides of the type $\text{CIP}(\text{NR}_2)_2$ react easily with $\text{R}'\text{MgX}$ (where R' is an alkyl or ϕ -alkenyl) and form substituted amides of alkyl- or

Card 1/4

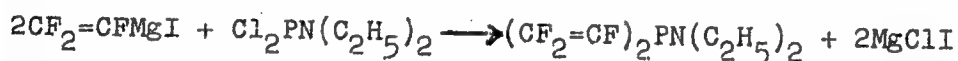
Perfluorovinylhalophosphines

77300
80V/63-4-6.34/37

or ϕ -alkenylphosphinous acid. For example, tetra-ethylamide of perfluorovinylphosphinous acid bp 89-90° C at 11 mm; n_D^{20} 1.4470) was obtained in 53.6% yield in the reaction:



Similarly, diethylamide of di-(trifluorovinyl)-phosphinous acid (bp 60° C at 25 mm; n_D^{20} 1.4098) was obtained in 37.5% yield on redistillation of fraction 49-53° C received in the reaction:



The fractional distillation must not be carried to completion as the residue decomposes explosively. It was shown further that amides of the type $R'P(NR_2)_2$ are decomposed by dry HCl and form primary and secondary

Card 2/4

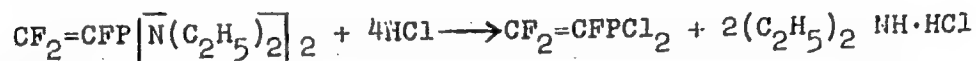
Perfluorovinylhalophosphines

77300

SOV/63-4-6-34/37

chlorophosphines. Decomposition of perfluorovinylphosphinous tetraethyldiamide with dry HCl gave perfluorovinyl-dichlorophosphine (yield 66%; bp 81.5-82° C;

n_D^{19} 1.4412):



Similarly, the decomposition of di-(trifluorovinyl)-phosphinous diethylamide gave di-(trifluorovinyl)-chlorophosphine (yield 60%; bp 94-95° C; n_D^{28} 1.4095;

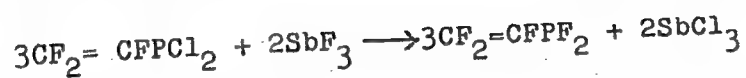
$(CF_2=CF)_2PCl$). Also ethyldichlorophosphine ($C_2H_5PCl_2$)

was synthesized. The first two chlorophosphines in reaction with antimonous fluoride were transformed into the corresponding perfluorovinylfluorophosphines, colorless liquids easily flaring up in air. Perfluorovinyl-dichlorophosphine thus gave perfluorovinyl-difluorophosphine (yield 64%; bp 2-3° C):

Card 3/4

Perfluorovinylhalophosphines

77300
SOV/63-4-6-34/37



Similarly, di-(trifluorovinyl)-chlorophosphine gave di-(trifluorovinyl)-fluorophosphine ($\text{CF}_2=\text{CF}$)₂PF (yield 50%; bp 53-65° C). There are 3 references, 1 U.K.; 1 German, 1 Soviet. The U.K. reference is: F. Bennett, H. Emeleus, R. Haszeldine, J. Chem. Soc., 1953, p 1565.

SUBMITTED: June 1, 1959

Card 4/4

5 (3)

AUTHORS:

Sterlin, R. N., Knunyants, I. L.,
Pinkina, L. N., Yatsenko, R. D.

SOV/62-59-8-29/42

TITLE:

Tetrafluorovinylsilane

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
1959, Nr 8, pp 1492-1493 (USSR)

ABSTRACT:

Starting from a consideration of the reaction of tetrachloro-silicon with alkyl- and aryl silanes and other organic silicon (or magnesia) halogenides, the present paper describes the attempted gradual substitution for the Cl-atom in SiCl_4 of a perfluorovinyl group. As expected, the introduction of such a group caused a decrease in the electron density in the central Si-atom. Thus the substitution of further groups is progressively facilitated. The tetrafluorovinylsilane is stable in aqueous acid solutions; in bases it is quantitatively split into trifluoroethylene which has been identified by its dibromide. The reaction is described in the experimental part. There is 1 reference.

SUBMITTED:

February 11, 1959

Card 1/1

86479

53630

1287, 2209, 1266

S/062/60/000/011/006/016
B013/B078

AUTHORS: Sterlin, R. N., Yatsenko, R. D., Pinkina, L. N.,
Knunyants, I. L.

TITLE: Perfluoro Derivatives of Nonmetals

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh
nauk, 1960, No. 11, pp. 1991 - 1997

TEXT: The preparation of perfluoro derivatives of phosphorus, arsenic, and antimony is described. From the reaction of perfluoro^{vinyl} magnesium iodide with $AsCl_3$, PCl_3 , and $SbCl_3$ in ether solution only tertiary derivatives were obtained: tri-(trifluorovinyl)arsine, tri-(trifluorovinyl)phosphine, and tri-(trifluorovinyl)stibine. Primary and secondary derivatives were not formed in this process. Perfluorovinyl dichloroarsine was obtained by splitting 10-alkyl-5,10-dihydrophenarsazine with dry HCl (Ref.4). A corresponding perfluorovinyl derivative was obtained in a quantitative yield as a result of the reaction of perfluorovinyl magnesium iodide with adamsite. Perfluorovinyl chloroarsine was

Card 1/3

Perfluoro Derivatives of Nonmetals

86479

S/062/60/000/011/006/016
B013/B078

isolated in a practically quantitative yield by the reaction of $\text{CF}_2\text{-CFAs}(\text{C}_6\text{H}_4)_2\text{NH}$ with liquid HCl . By treating the tetraethyldiamide of phosphorous acid chloride and the tetraethyldiamide of ethyl phosphinic acid with dry, gaseous HCl in xylol solution, phosphorus trichloride, and ethyldichlorophosphine, respectively, were obtained. From the reaction of perfluorovinyl magnesium iodide with the tetraethyldiamide of phosphorous acid chloride, the tetraethyldiamide of perfluorovinyl phosphinic acid was obtained. This was converted into trifluorovinyl dichlorophosphine by reaction with dry HCl in ether solution. By treating the latter with antimony trifluoride, perfluorovinyl difluorophosphine was obtained. In a similar manner, the diethylamide of di-(trifluorovinyl) phosphinic acid was obtained from $(\text{C}_2\text{H}_5)_2\text{NPCl}_2$ and perfluorovinyl magnesium iodide. By decomposing it with dry HCl , di-(trifluorovinyl)chlorophosphine was synthesized. By treating the latter with antimony trifluoride, di-(trifluorovinyl)fluorophosphine was obtained. As opposed to the trifluoromethyl derivatives of arsenic and phosphorus, the prepared tri-(trifluorovinyl) arsine and tri-(trifluorovinyl)phosphine do not

Card 2/3

Perfluoro Derivatives of Nonmetals

86479

S/062/60/000/011/006/016
B013/B078

separate trifluoroethylene when heated. Thus, the perfluorovinyl radical in the said compounds does not show any properties of pseudohalogens. Ye. P. Shcherbina and L. F. Razgovorov assisted in this work. There are 8 references: 2 Soviet.

SUBMITTED: June 4, 1959

Card 3/3

IVANOV, B.; ZELINSKIY, I.; TURUTIN, I.; DEM'YANENKO, I.; FILIPPOV, A.
(Petrovsk, Kazakhskaya SSR); ASLANLY, Musa (Baku);
YATSENKO, S.; TEREKHOVA, R.

Letters to the editors. Sov.profssoiuzy 16 no.15:38-41 Ag
'60. (MIRA 13:8)

1. Predsedatel' mestnogo komiteta vagonnogo depo Riga Tovarnaya
(for Ivanov).
2. Tekhnicheskii inspektor Dorozhnogo komiteta
profsoyuza rabotnikov-zheleznodorozhnogo transporta Skovorodinskogo
otdeleniya Zabaykal'skoy magistrali (for Zelinskiy).
3. Redaktor
mnogotirazhnoy gazety "Zhilstroyevets" g. Makeyevka (for
Turutin).
4. Instruktor Ukrainского respublikanskogo komiteta
profsoyuza rabochikh i sluzhashchikh sel'skogo khozyaystva i
zagotovok (for Dem'yanenko).
(Trade unions)

(Labor and laboring classes)

ORLYUK, S.; YATSENKO, S.

Determine available working capital correctly. Fin. SSSR 23
no.2:68-70 F '62. (MIRA 15:2)

1. Zamestitel' nachal'nika finansovogo otdela i tsentral'noy bukhgalterii upravleniya stroitel'stva Kiyevskogo sovnarkhoza (for Orlyuk).
 2. Zamestitel' glavnogo bukhgaltera Kiyevskogo sovnarkhoza (for Yatsenko).
- (Kiev Province—Construction industry—Finance)